

AC NO: AT83989 Database: N-Gene-seg - 1101

CC The present invention describes a method for identifying a bacteriophage
CC coding region encoding a product active on an essential bacterial
CC target. The method comprises identifying a nucleic acid sequence encoding
CC a gene product that provides a bacteria-inhibiting function when an
CC uncharacterised bacteriophage infects a pathogenic bacterium. The
CC compound active on a target of a bacteriophage inhibitor protein in a
CC bacteria is used to treat or prevent a bacterial infection in an animal.
CC AA68243 to AA69442 and AAB1523 to AAB16954 represent bacteriophage
CC nucleotide and protein sequences which are used in the exemplification of
CC the present invention.

XX Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 other;

Query Match 100.0%; Score 159; DB 21; Length 41708;
Best Local Similarity 100.0%; Pred. No. 7,7e-42;
Matches 159; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 atggtacccaagaatttttaaaactaaacttgagttgttcagatatgtacgctcagaaa 60
Db 34393 atggtaacccaagaatttttaaaactaaacttgagttgttcagatatgtacgctcagaaa 34452
Qy 61 ctcatagatgagggcagggcgatgaaataagttgttcagacctattatccaaaactt 120
Db 34453 ctcatagatgagggcagggcgatgaaataagttgttcagacctattatccaaaactt 34512

Qy 121 gcagaacgtcatcacgcccgcgtatcgtcgaaatttaa 159
Db 34513 gcagaacgtcatcacgcccgcgtatcgtcgaaatttaa 34551

RESULT 4

AAC86106
ID AAC86106 standard; cDNA; 41708 BP.

XX AAC86106;

XX 29-AUG-2001 (first entry)

XX Complete genome of bacteriophage 77.

XX DnaI; S. aureus; inhibitor; bacteriophage 77; ORF 104; phase 77ORF104;
XX screening assay; ss.

XX Bacteriophage 77.

XX WO200146383-A2.

XX 28-JUN-2001.

XX 21-DEC-2000; 2000WO-US35180.

XX 22-DEC-1999; 95US-0470512.

XX 12-OCT-2000; 2000US-0689952.

XX (PHAG-) PHAGETECH INC.

XX (WILL/) WILLIAMS K M.

XX Pelletier J, Gros P, Dubow M;

XX WPI; 2001-418052/44.

XX Novel DnaI polypeptides useful for treating and diagnosing microbial,
XX preferably bacterial, diseases such as those caused by Staphylococcus
XX aureus

XX Disclosure; Fig 2; 107pp; English.

XX This sequence represents the genome of Bacteriophage 77. The
XX growth inhibitory gene product of ORF 104 interacts with DnaI derived
XX from S. aureus, to form the basis of a screening assay. DnaI
XX polypeptides and polynucleotides are useful for treating microbial,
XX preferably bacterial, especially staphylococcal, infections. DnaI

CC polypeptides and polynucleotides are useful for biological, diagnostic,
CC prophylactic, clinical and therapeutic use, and as components in
CC databases useful for search analyses as well as in sequence analysis
CC algorithms.

XX Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 other;

Query Match 100.0%; Score 159; DB 22; Length 41708;
Best Local Similarity 100.0%; Pred. No. 7,7e-42;
Matches 159; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 atggtacccaagaatttttaaaactaaacttgagttgttcagatatgtacgctcagaaa 60
Db 34393 atggtaacccaagaatttttaaaactaaacttgagttgttcagatatgtacgctcagaaa 34452
Qy 61 ctcatagatgagggcagggcgatgaaataagttgttcagacctattatccaaaactt 120
Db 34453 ctcatagatgagggcagggcgatgaaataagttgttcagacctattatccaaaactt 34512
Qy 121 gcagaacgtcatcacgcccgcgtatcgtcgaaatttaa 159
Db 34513 gcagaacgtcatcacgcccgcgtatcgtcgaaatttaa 34551

RESULT 5

AAT83989

ID AAT83989 standard; DNA; 1134 BP.

XX AAT83989;

XX 27-AUG-1998 (first entry)

XX DNA encoding a Staphylococcus aureus protein of unknown function.

XX Staphylococcus aureus protein; ribozyme; antisense sequence; control;
XX Staphylococcal gene; regulatory element; bacterial gene expression;
XX vaccine; Staphylococcal infection; food poisoning; scaled skin syndrome;
XX toxic shock syndrome; ss.

XX Staphylococcus aureus.

XX Key Location/Qualifiers

XX CDS 593..946

XX /*tag= a

XX WO9730070-A1.

XX 21-AUG-1997

XX 19-FEB-1999; 97WO-US02318.

XX 20-FEB-1999; 96US-0011888.

XX (SMIK) SMITHKLINE BEECHAM CORP.

XX Black MT, Burnham MK, Hodgson JE, Knowles DJC, Nicholas RO;
XX Pratt JM, Reichard RW, Rosenberg M, Ward JM;

XX WPI; 1997-424969/39.

XX P-PSDB; AAW28036.

XX Novel polypeptide(s) from Staphylococcus aureus strain WCUH29 - used
XX to isolate antimicrobial compounds, and in vaccines against S.
XX aureus infection

XX Claim 9; Page 797; 989pp; English.

XX The present sequence encodes a Staphylococcus aureus protein of
XX unknown function. The present sequence was isolated from a
XX library of clones of S. aureus WCUH 29 in Escherichia coli. The DNA
XX sequence can be used in the construction of ribozymes and antisense
XX sequences to control the expression of Staphylococcal genes. The DNA

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L26 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 2001:472892 CAPLUS
DN 135:97410
TI Sequence of Staphylococcus aureus DnaI protein domain interacting with S.
aureus **bacteriophage 77** ORF 104 protein, and its uses
in drug screening, diagnosis and therapy
IN Pelletier, Jerry; Gros, Philippe; Dubow, Michael
PA Phagotech, Inc., Can.; Williams, Kathleen M.
SO PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001046383	A2	20010628	WO 2000-US35180	20001221
	WO 2001046383	A3	20020103		
	W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
PRAI	US 1999-470512	A	19991222		
	US 2000-689952	A	20001012		

L26 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 2000:384488 CAPLUS
DN 133:39115
TI Development of novel antimicrobial agents based on bacteriophage genomics
IN Pelletier, Jerry; Gros, Phillippe; Dubow, Michael
PA Phagotech, Inc., Can.
SO PCT Int. Appl., 456 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000032825	A2	20000608	WO 1999-IB2040	19991203
	WO 2000032825	A3	20010118		
	W:		AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
EP	1135535	A2	20010926	EP 1999-958449	19991203
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO		
PRAI	US 1998-110992P	P	19981203		
	US 1999-326144	A	19990603		

US 1999-407804	A	19990928
US 1999-157218P	P	19990930
US 1999-168777P	P	19991201
US 1999-454252	A	19991202
WO 1999-1B2040	W	19991203